AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A microcontroller, comprising:

a circuit comprising an analog circuit and a digital circuit wherein said analog circuit comprises ~~an~~ a dedicated analog input and ~~an~~ a dedicated analog output and said digital circuit comprises a dedicated digital input and a dedicated digital output;

a wirebond pad;

a processor; and

a user selectable switching circuit that selectively connects at least one of said dedicated analog input, said dedicated analog output, said dedicated digital input and said dedicated digital output to the wirebond pad under control of the processor after packaging of said circuit.

2. (previously presented) The microcontroller according to claim 1, wherein the analog circuit comprises a configurable analog circuit block.

3. (previously presented) The microcontroller according to claim 1, wherein the digital circuit comprises a configurable digital circuit block.

4. (canceled)

5. (canceled)

6. (canceled)

7. (currently amended) The microcontroller according to claim 1, wherein the switching circuit comprises a tristate analog buffer amplifier coupling the dedicated analog output to the wirebond pad, and wherein the dedicated analog output is switched by tristate control of the tristate analog buffer amplifier.

8. (currently amended) The microcontroller according to claim 1, wherein the switching circuit comprises an analog buffer amplifier in series with an analog switch coupling the dedicated analog output to the wirebond pad, and wherein the dedicated analog output is switched by the analog switch.

9. (currently amended) The microcontroller according to claim 1, wherein the switching circuit comprises an analog switch coupling the dedicated analog output to the wirebond pad, and wherein the dedicated analog output is switched by the analog switch.

10. (currently amended) The microcontroller according to claim 1, wherein the switching circuit comprises an analog switch coupling the dedicated analog input to the wirebond pad, and wherein the dedicated analog input is switched by the analog switch.

11. (currently amended) The microcontroller according to claim 1, wherein the switching circuit comprises a tristate analog buffer amplifier coupling the dedicated analog input to the wirebond pad, and wherein the dedicated analog input is switched by tristate control of the tristate analog buffer amplifier.

12. (currently amended) The microcontroller according to claim 1, wherein the switching circuit comprises a tristate logic gate coupling the dedicated digital output to the wirebond pad, and wherein the dedicated digital output is switched by tristate control of the tristate logic gate.

13. (previously presented) The microcontroller according to claim 12, wherein the tristate logic gate comprises an inverter.

14. (previously presented) The microcontroller according to claim 12, wherein the tristate logic gate comprises a buffer.

15. (currently amended) The microcontroller according to claim 1, wherein the switching circuit comprises a multiple input logic gate coupling the dedicated digital output to the wirebond pad, and wherein the dedicated digital output is switched by an input to the multiple input logic gate.

16. (previously presented) The microcontroller according to claim 15, wherein the multiple input logic gate comprises a NAND gate.

17. (currently amended) The microcontroller according to claim 1, wherein the switching circuit comprises a tristate logic gate coupling the dedicated digital input to the wire bond pad, and wherein the digital input is switched by tristate control of the tristate logic gate.

18. (previously presented) The microcontroller according to claim 17, wherein the tristate logic gate comprises an inverter.

19. (previously presented) The microcontroller according to claim 17, wherein the tristate logic gate comprises a buffer.

20. (currently amended) The microcontroller according to claim 1, wherein the switching circuit comprises a multiple input logic gate coupling the dedicated digital

output to the wirebond pad, and wherein the dedicated digital output is switched by an input to the multiple input logic gate.

21. (previously presented) The microcontroller according to claim 20, wherein the multiple input logic gate comprises a NAND gate.

22. (previously presented) The microcontroller according to claim 1, wherein the switching circuit comprises an isolation resistor isolating the wirebond pad from one of a digital input, an analog input and analog output.